# "The Complex Method" ~~By: j0sh135742~~

This TEK is a new approach to ingesting salvia trough isolating and complexing Salvinorin A from salvia divinorum plain leaf. This new way allows for Salvinorin A to be used in tinctures without the use of ethanol, in vape carts, in nasal spray formulations, and placed on blotter tabs. This TEK also increases the bioavalibility of Salvinorin A trough the oral mucosa so that previous methods of "quidding" that included brushing of the oral mucosa and using an alcohol based mouthwash are obsolete. This old way of quidding has been seen as damaging to the oral mucosa and overall inconvenient to those who would like to quid. Furthermore the ethanol based tinctures have been known to damage the oral mucosa due to the high concentration of ethanol in solution (40-95% ABV or 80-190 proof). This TEK was made by j0sh135742. If you would like to distribute this TEK, please include all text and give credit to the original author. Read this article before Salvia experimentation: http://sagewisdom.org/usersguide.html

#### Materials needed will be:

- Multiple large glass mason jars
- Smaller glass mason jar
- Coffee filters
- Fine metal strainer
- 250g or more of Salvia Divinorum plain leaf (no extract)
- Naphtha
- Pure acetone
- 99% Isopropyl alcohol
- 2-hydroxypropyl-beta-cyclodextrin (HPBCD)
- Fan

#### **OPTIONAL**

- Double boiler setup
- Evaporating dish
- Spray dryer (Lab Machine)

### **EXTRACTION**

This Extraction TEK is based on gibrian2's TEK with slight modification. Make sure to read all instructions before preforming the extraction. Make sure you are well versed on what is required before you attempt this TEK.

Warning! Only preform this TEK in a well ventilated area. This TEK involves acetone, naphtha, and isopropyl alcohol fumes, all of which are flammable and potentially damaging to your health if inhaled.

- 1. Crush up your salvia leaves so they are in small pieces.
- 2. Chill your acetone to 0°F
- 3. Add around 30g of salvia leaves into a large mason jar.

- 4. Pour the 0°F acetone into the jar so the level of acetone is over the level of the salvia by 1 or 2 cm and stir vigorously for about a minute.
- 5. Pour your acetone trough a fine mesh strainer into another mason jar. The leaves can be discarded at this point or you can do another acetone pull if you are stringent on getting every last bit of Salvinorin A out of the leaves, however this will introduce more impurities.
- 6. Repeat the acetone pull on however many grams of leaf you are planning on extracting in 30g batches and put all the Salvinorin containing acetone into the same container.
- 7. Leave the acetone in a dark place until all the sediment settles to the bottom. Siphon off as much acetone as possible while leaving the sediment down the bottom and discard the sediment.
- 7a. Another way you can do this is by trying to suck up the sediment with a long glass syringe or pipette. This may result in more loss, but if done properly and carefully it can actually minimize loss.
- 8. Let the acetone evaporate in a cool dark place. You can also use a fan to gently blow air over it to aid in the evaporation process. Once you are done you should have a green looking powder in the bottom. Take this out, weigh it, and then add it to a smaller mason jar.
- 9. Add 50ml of naphtha per gram of green powder you have to the small mason jar and agitate well for a few minutes. Let the solution settle and siphon off as much naphtha as possible without touching the sediment. This time your sediment is Salvinorin A so try not to disturb it. Keep washing your powder with naphtha until the naphtha doesn't turn green anymore. Once you siphoned off the last of the naphtha you can let the little bit that's in the sediment evaporate.

This next step is optional. This will give you nearly pure Salvinorin A, however you will loose a portion of your yield. For this step you will use isopropyl alcohol to remove the rest of the lipids and other plant matter that made its way into your extract. Salvinorin A is slightly soluble in IPA at 0.7mg/ml so that is around how much you will loose. We can minimize this loss by chilling the IPA to 0°F. For smaller extractions this is not recommended. If you want to skip this step then go directly to step 11.

- 10. Add around 50ml of 0°F IPA to the powder, stir, and allow to settle. Siphon off the IPA and save the sediment. Repeat this step 3 or so more times until you have a clean product. You could attempt to save the IPA and evaporate it and repeat the 0°F IPA pull to get as much Salvinorin A out of it as possible but this would take a while and add a lot more time to the extraction.
- 11. Dry the salvinorin A and add about 150ml of 0°F acetone to the powder. There may be some more insoluble sediment in the bottom. If so then siphon off the acetone and toss the sediment.
- 12. Evaporate your acetone from step 11 in a cool dark place and let it dry fully. If you have an accurate milligram scale then you can use that to weigh your final product. If you don't have a scale that can measure that low then you can use the formula of 2.2mg of Salvinorin A per gram of plain leaf salvia divinorum. We are using a slightly smaller amount than is actually in the leaves due to the proposed loss of Salvinorin A during the extraction process. If you opted to purify with IPA then take out the amount of Salvinorin A that would be expected to be taken from the IPA. Ex.  $(2.2 \text{mg X leaf in g}) (0.7 \text{mg X ml of IPA used in total}) = Salvinorin A yield. If I used 100g of leaf and washed with 50ml of IPA 3 times it would look like this <math>(2.2 \times 100) (0.7 \times 150) = \sim 209.5 \text{mg}$  of Salvinorin A

Congratulations! You now have isolated Salvinorin A from plain leaf. Using this you could create an extract of the plant or use it to make an ethanol tincture. This next step will make an inclusion complex between Salvinorin A and HPBCD. This will increase the bioavalibility of Salvinorin A trough the oral and nasal mucosa, as well as make it soluble in popular electronic vaporizer liquids such as vegetable glycerin and propylene glycol. This allows the Salvinorin A to be vaporized in an RDA type vaporizer or in a cartridge instead of smoked. This also allows for a tincture to be made without ethanol meaning your mouth won't burn unlike the popular tinctures on the market today.

#### COMPLEXATION

This portion of the TEK will involve making a cyclodextrin inclusion complex with Salvinorin A. The benefits of this complexed version have already been stated earlier.

Warning! This involves evaporating acetone which is flammable. Only do this in a well ventilated area! Make sure to read all instructions before preforming the complexation. Make sure you are well versed on what is required before you attempt this TEK.

- 1. Put your Salvinorin A powder in a jar or in an evaporation dish if you have one. Take your Salvinorin A powder and add 5 times the amount of Salvinorin A you have. For example if you have 100mg of proposed Salvinorin A add 500mg of HPBCD. The ideal ratio is 1:3 however we add an excess to promote efficient complexation.
- 2. Add enough acetone to dissolve everything. You can do one of two techniques to complex the Salvinorin A. These two methods are described in steps 2a and 2b. Choose whatever method suits you best.
- 2a. The easiest and safest way to do this is by pure evaporation. Once you have everything dissolved in the acetone you just let it evaporate with the aid of a fan in an evaporating dish or in a mason jar. This is not the most efficient method however there is a way to get around this. You can evaporate the acetone fully, then repeat the evaporation 2 or 3 more times to make sure as much is complexed as possible. Anecdotal evidence shows that 1 evaporation should be enough to complex the Salvinorin A, however I choose to play it safe and do it a minimum of 2 times.
- 2b. This step is a bit dangerous and should only be preformed by a trained professional. Only preform this under a fume hood or outside. Acetone vapors are highly flammable and potentially dangerous to your health if inhaled. Set up a double boiler setup with the water at a temperature of  $100^{\circ}\text{F} 115^{\circ}\text{F}$ . Do not exceed this temperature as the boiling point of acetone is  $\sim 133^{\circ}\text{F}$ . This will speed up the evaporation and complexation.
- 3. After you have complexed your Salvinorin A you are ready to do as you please with it. Store it in an amber glass vial or a vial painted black for storage as Salvinorin A is believed to be sensitive to UV light. As stated before this can be used to make tinctures, tabs, vape carts, nasal sprays, or whatever else you feel like making with it.

## **USES**

In order to make the aforementioned vape juice, tincture and nasal spray all you need to do is mix the complexed formulation into your choice amount of vegetable glycerin (VG). Please note that propylene glycol (PG) degrades the bond between the cyclodextrin and the salvinorin a within it. Because of this your vape juices, tinctures, and nasal spray formulations are to be made exclusively with VG.

When making vape juices, tinctures and nasal sprays be cautious of your dosing and how much you put in your juices. You MUST keep track of how much raw salvinorin a in mg/ml are in your solution at all times and cross reference that with whatever your preferred dosing measurement would be. As an example most people would take 1ml of a tincture as an accurate representation of "one dose". Using the information you obtained from your yield amounts calculate and keep track of how much salvinorin a will be in that final 1ml dose.

Same goes for nasal sprays except they tend to dispense .1ml of liquid per pump. You can simply use this as your new dose amount and do all other relevant calculations surrounding it. IF you are unsure how much is dispensed per spray on whatever nasal spray device you have discard it and purchase a nasal sprayer with known measurements.

In order to lay the salvinorin a on blotter tabs all you have to do is dissolve it in 100% pure acetone or IPA. Acetone tends to evaporate quicker than IPA making the process that much quicker and easier. If you wanted to make tabs with around 5mg of pure salvinorin a on the tab you could take, for example, your yield of 50mg and add 10 drops of acetone to dissolve it. Do note this is not 50mg of final complexed product. This is 50mg of salvinorin a within the complexation. The calculations should not be difficult if you logged how much salvinorin a you should have extracted compared to your final product weight after complexing the salvinorin a. Now in your solution you have 50mg of salvinorin a dissolved in 10 drops of acetone, which makes 5mg per drop of acetone. You can then use that information to place 1 drop of acetone on each blotter paper to get your desired yield of 5mg per tab.